



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,189	02/28/2002	Tae-Sung Kim	1567.1030	4934

21171 7590 09/23/2003  
STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

CLINGER, JAMES C

ART UNIT PAPER NUMBER

2821

DATE MAILED: 09/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/084,189

Applicant(s)

Kim

Examiner

Jim Clinger

Art Unit

2821



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Aug 13, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Feb 28, 2002 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2821

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyama et al.(4,908,547) in view of Kiyonori(JP 62216138).

Claims 1 and 11-12, figure 3 discloses a vacuum tube with index stripes(25), phosphor screen(22), electron gun(13), deflection yoke, detector(14), and an index circuit(43) transmitting a signal obtained by synchronizing(40) an index signal with a color signal(41). Toyama does not disclose a light window. Figure 2 of Kiyonori discloses a light window for improved reception of an index light signal.

While the recited positioning of the detector/light window is not specifically disclosed, from figure 3 of Toyama or figure 1 of Kiyonori it is obvious for the light window to be in the recited range of positions for improved sensing of radiation from the index strips.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the window disclosed in Kiyonori with the tube disclosed in Toyama for improved reception of an index light signal.

Art Unit: 2821

3. Claims 2-10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyama in view of Kiyonori and further in view of Kuwabara et al.(5,952,767).

While Toyama and Kiyonori disclose a plurality of detectors(col. 1, lines 34-38), Toyama and Kiyonori do not disclose four detectors.

Claim 2, figure 2 of Kuwabara discloses four light detectors(19) for detecting radiation from index strips.

Claims 3, 7 and 13, the recited positioning is an obvious modification of the position disclosed in Kuwabara.

Claims 4 and 14, Kuwabara discloses 12 funnels(14) and necks(17).

Claim 5, figure 1 of Kuwabara discloses a divided screen.

Claims 6 and 15, figure 2 of Kuwabara discloses four windows(19) on each of four sides of the funnels(14).

Claims 8-10, the recited limitations are well known parameters in the art for a CRT.

Claims 9-10 and 15, the disclosed position of the window in Kiyonori appears to be in the recited range, or obviously close to it.

It would have been obvious to one of ordinary skill in the art at the time of the invention to position the four detectors disclosed in Kuwabara on the CRT disclosed in Toyama and Kiyonori for improved radiation detection.

Art Unit: 2821

***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,400,085 in view of Kim and Kuwabara. As referenced above, Kim discloses a window as recited and Kuwabara discloses the recited window positioning. All other limitations are recited in the claims of Patent 6,400,085.

Art Unit: 2821

The motive for combining the two references is for improved sensing of the radiation from the index stripes.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the Double Patenting rejection, Toyama is not required to teach the limitation concerning a window because it is recited in claim 14 of Kim(6,400,085).

While the recited range of locations for the window is not specifically disclosed in the above references, from figure 2 provided in the Kiyonori reference the window appears to be positioned in this recited range.

***Correspondence***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Clinger whose phone number is (703) 305-0619.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

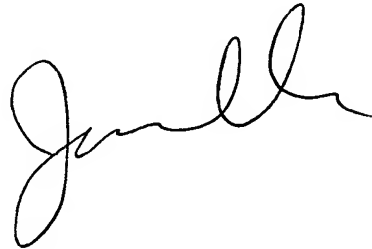
Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform

Application/Control Number: 10/084,189

Page 6

Art Unit: 2821

with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The  
Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

A handwritten signature in black ink, appearing to be "J. M. L.", written in a cursive style.